

#026, Long Term Unbundling and Network Evolution

Recent Regulatory Activity - Continued

- Iowa, May, 1995 The Iowa legislature passed a bill allowing local competition and providing for price cap regulation for larger LECs. Price regulation is available to larger LECs after approval of tariffs that offer unbundled access to "essential facilities." The Iowa Utilities Board must initiate a rulemaking proceeding on local competition rules by September 1, 1995. The rules would cover certification, unbundling, interconnection, and access to LEC rights-of-way. The law requires "reciprocal, cost-based compensation" for termination of traffic between LECs and competitors. LECs must provide interim number portability until the board determines that a final plan is economically and technically feasible.
- Kentucky, PSC, Jan. 1995, rules to provide dialing parity on a 2-PIC basis for intra-LATA toll service by end of 1997
- Maryland, August 1995 Teleport Communications Group has filed with the Maryland PSC for authority to offer competitive local residence service. It plans to offer local switched services in the Baltimore LATA.
- Michigan, PSC, October 1994 authorizes U S Signal Corp to provide local exchange service January, 1995 U S Signal asked the PSC to prescribe interconnection arrangements February, 1995 PSC mandates reciprocal compensation and interim number portability rates PSC also will start a generic proceeding on interconnection issues on June 1 to conclude by March 1, 1996 to address permanent arrangements for unbundling, mutual compensation and number portability
- Michigan, March, 1995 MCI Metro received authorization to provide local exchange service in twenty exchanges in the Detroit area
- Michigan, May 1995 Teleport Communications Group received authority to provide local exchange services in Michigan. It plans to offer operator services, directory assistance, lifeline, 900 blocking, and custom calling features within its 120 mile Detroit network, and plans to resell some of Ameritech's services. Also, A T & T applied for authority to offer competitive local exchange service in the Grand Rapids area. Initially it plans to be a re-seller.
- Minnesota, PSC mandates intra LATA dial 1- equal access by February 15, 1996
- Minnesota, May 1995 The Minnesota legislature passed a bill that would permit local exchange competition by August 1, 1995. Interim rules would apply initially, but the PUC must approve final regulations by August 1, 1997. LECs with 50,000 or more subscribers must provide interconnection to competing carriers. The bill also provides for alternative regulation for incumbent LECs.
- Nevada, August 1995 The Nevada PSC granted authority to provide nonswitched local service to Phoenix FiberLink, the first competitive access provider (CAP) to apply in Nevada. Phoenix FiberLink expects to begin service in a few months.
- New Hampshire, May 1995 The New Hampshire legislature passed a bill authorizing local exchange competition by December 31, 1996. The PUC is authorized to allow entry into the local market if the area is serviced by a LEC with 25,000 or more access lines and if entry would be "consistent with the public good."

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Recent Regulatory Activity - Continued

- New Jersey, Jan. 1995. MFS Intelenet requests authority to provide local switched service and seeks co-carrier status
- New York, October 13, 1994. NY PSC approves the Rochester Open Market Plan to become effective Jan. 1, 1995
- New York, Jan. 24, 1995. MFS and NYNEX sign an interconnection agreement, pending PSC approval, to include mutual compensation and improved number portability
- New York, Feb. 1995. CableVision Lightpath, Inc. and NYNEX sign an interconnection agreement allowing CableVision to provide local exchange service to its cable customers. The agreement provides for reciprocal compensation for terminating calls and provides for interim number portability through use of remote call forwarding
- New York, Feb. 1995 PSC proposed state-wide application of the interim local number portability system adopted as part of Frontier's Open Market Plan. It also authorized a feasibility study of long term solutions to the number portability problem. It further suggested a framework for achieving interconnection agreements and reciprocal compensation arrangements. It hopes to conclude meetings on the details of these proposals by the end of March
- New York, March, 1995 NYNEX and a group of CAPs, IXC's and other carriers are planning to conduct a trial of number portability in NYC and Rochester. The trial is an attempt to go beyond interim number portability. It is scheduled to begin in February 1996
- New York, July 1995 **An industry task force issued requests for proposals. The task force selected the response from MCI metro and several equipment manufacturers for trials in Manhattan. U. S. Intelco Networks and its partners were selected to run trials in the Rochester area. The PSC will review the plans of the two groups and make recommendations to the full commission, perhaps in August.**
- North Carolina, Feb. 1995 Bills authorizing the PSC to adopt rules governing interconnection, rates for interconnection, unbundling of networks, number portability, and universal service policies have been introduced in the North Carolina House and Senate. No hearings have been held yet
- North Carolina, April 1995 The legislature enacted a law that permits full local exchange competition. Under the law, local exchange competition begins on July 1, 1996, or on the date that incumbent LEC comes under price cap regulation, whichever occurs first. The North Carolina Commission must also find that local competition is in the public interest. The Commission is authorized to define rules for interconnection, unbundling, number portability, local service resale, and universal service requirements. The Commission must adopt interim rules on universal service by the end of 1996. Permanent rules on universal service must be in place by July 1998
- North Carolina, April 1995 **IntelCom Group, Inc. (ICG) has begun construction of a 35 mile network connecting the cities of Greensboro and Winston-Salem.**

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Recent Regulatory Activity - Continued

- **North Carolina, August 1995** The North Carolina Utilities Commission recently adopted interim rules regarding certification of CLECs and interconnection of the CLECs' and LECs' networks. The Commission is seeking comment on local exchange issues by October 4, 1995 and a hearing is scheduled on universal service in Feb. 1996.
- **Ohio, Dec. 1994** MFS Intelenet applied for a license to provide local switched service and asked the PUC to address co-carrier issues such as number portability and reciprocal compensation
- **Ohio, April 1995** The staff of the Ohio PUC has drafted a comprehensive set of proposals to implement local competition. The proposal calls for unbundling of the local network, true number portability, resale of services, and cost-based, tariffed reciprocal compensation for terminating traffic. The draft rules will be subject to public comment. Unbundled network categories include: local access, switching, transport and other functionalities.
- **Ohio, August 1995** The Ohio Public Utilities Commission gave Time Warner Communications (TWC) permission to offer local telephone service to residential and business users in 37 of Ohio's 88 counties. The ruling cleared one of several obstacles TWC faces in its plan to start service in Ohio by mid-1996. According to a spokesperson, this is TWC's largest filing to offer local telephone service. Besides other conditions, Time Warner's ability to provide service in the state hinges on whether it can agree on interconnecting its network with those of existing local telephone companies. Time Warner Communications, a unit of Time Warner Inc., now provides local telephone service in Rochester, NY, and plans to offer service in Manhattan by yearend 1995.
- **Ohio, August 1995** The Ohio PUC approved MFS Intelenet's application to provide switched local service in 62 counties served by Ameritech. Intelenet is the first CLEC licensed in the state. The PUC plans to start a rulemaking on local exchange competition in September 1995 which could take as long as 18 months.
- **Oregon, Dec. 1994** MFS Intelenet filed with the PUC to provide switched local service, seeks co-carrier arrangements such as interconnection, number assignment, meet point billing, shared platforms for 911 and reciprocal compensation. MCI Metro and Electric Lightwave have also filed to provide switched local service.
- **Pennsylvania, May 1995** Eastern TeleLogic Corp (ETC) has asked the PUC for authority to provide local exchange service in the Philadelphia area. ETC will use its 230 mile SNET network and seeks interconnection to the unbundled LEC network, a "bill and keep" compensation arrangement for terminating traffic, and asked the Commission to develop a long term solution for number portability. MFS, Teleport and MCI also have petitions to provide local service pending

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Recent Regulatory Activity - Continued

- **Pennsylvania, July 1995** An Administrative Law Judge recommended to the PUC that MFS Intelenet be given authority to provide switched local service in the Pittsburgh and Philadelphia areas and co-carrier status. The recommended ruling would allow MFS Intelenet to interconnect with Bell Atlantic. The PUC is likely to review the judge's decision before it becomes final.
- **South Carolina, August 1995** The PSC has granted a certificate to American Communications Services to provide intrastate private line and special access services. It is the first CAP to be certified in South Carolina. A working group representing industry participants and the Commission's staff has been formed to resolve issues involved in developing local exchange competition in the state.
- **Tennessee, Feb. 1995** Rival bills opening the local exchange market to competition were introduced into the Tennessee legislature
- **Tennessee, July 1995** Acting under the provisions of a law passed this year authorizing the PSC to certify competitive access providers, the PSC granted six companies authority to enter the state's local exchange market. The approved providers are Time Warner AxS, Hyperion of Tennessee L.P., MCImetro, MFS, Signal Communications, and an affiliate of IntelCom Group. The PSC has still to develop rules on interconnection and other local exchange competition issues.
- **Texas, 1995** Legislation allowing local competition via resale competition pursuant to tariff approved within 190 days of 9/1/95. Six year network build-out requirements for IXC's with > 6% share of state long distance market (A T & T, MCI, Sprint). Only 40% of their local service offering may be resold LEC service. Unbundling rules, LEC network costing and pricing study due 4/1/97. Interim number portability by 11/1/95. Imputation by 12/1/95. IntraLATA equal access prohibited until Southwestern Bell may enter interLATA market. Basic service basket subject to rate cap for at least four years. PUC sets rate range for somewhat competitive services.
- **Utah, Feb. 1995** The Utah legislation enacted the Telecom Reform Act which provides for local exchange competition and price cap regulation. The PSC may certify local exchange providers, effective May 1, 1995, and can establish competitive zones on a geographic or on a service related basis. A LEC will be given pricing flexibility when it faces competition for a particular service. U S WEST will go through a final rate case which must be started by May 1, 1997. Then its rates will be frozen for 3 years, beyond that, rates may be increased using an indexing method. The PSC must adopt rules governing intraLATA toll and local service competition by December 31, 1997.
- **Utah, August, 1995** Electric Lightwave, Inc., and Phoenix FiberLink have been certified by the PSC to provide local exchange service. ELI stated it seeks to offer local switched services, Centrex, switched dataPBX and shared-tenant services, as well as special access, private line and interexchange services.

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Recent Regulatory Activity - Continued

- Virginia, Feb. 1995 The legislature passes a bill allowing exchange competition and empowers the CC to establish rules for competitive entry and local exchange interconnection. The Governor signed the bill February 23, 1995.
- Virginia, August 1995 The Virginia State Corp. Commission removed a restriction that prevented the Ics from providing intra-LATA toll service. ICs certified in Virginia may enter the intraLATA toll market on October 1, 1995.
- West Virginia, August 1995 The PSC has created a task force to address local exchange competition issues. It has developed 44 questions to be addressed by the task force during a series of fall and winter meetings.
- FCC Docket 91-346, "Inquiry into Intelligent Networks" FCC requested ex partes. The seven RBOCs did theirs in March, 1995. The Co-Champions of Task Group 026 did an ex parte on March 21, 1995.
- FCC Docket 95-20, "Computer III" In this remand docket, the FCC seeks comments on the effectiveness of current nonstructural safeguards and on other unbundling proceedings. Comments due 4/7/95, replies due 4/28/95. Comments were filed 4/7/95. An extension of time was granted for reply comments, due May 19, 1995.
- FCC RM 8614, March 7, 1995 MFS petitions the FCC to adopt rules requiring Tier 1 LECs to offer the unbundled loop to state-certified local exchange competitors. Comments were filed on 4/10/95 and replies on 4/25/95.

Related Recent Industry Forum Activity

- NOF Issue #217, "Tandem Switching Provider" Develop agreements on Installation, Testing, Maintenance and Network Management Guidelines for the NOF Reference Document. Issue is tabled pending TSP (Tandem Switch Provider) participation. **Issue is still tabled.**
- NOF Issue #219, "SS7 Interconnection Additional Tests" Modify existing NOF Test Plan to include additional requirements to establish compatibility between LEC networks serving the same geographical area. NYNEX will provide generic test scripts for review by next meeting (5/8-5/11). Determination will need to be made if tests apply to EC-EC, EC-IC, IC-IC and/or EC-Wireless. Issue carried over to July 10th NOF. **NYNEX contributions in progress.**

#038. Call Forwarding Control Capabilities for End Users and ESPs

#044. *AIN Access by Non-LEC Resource Element*

Recent Regulatory Activity

- FCC Docket 91-346, "Inquiry into Intelligent Networks" FCC requested ex partes. The seven RBOCs did theirs in March, 1995. The Co-Champions of Task Group 026 did an ex parte on March 21, 1995.

#045. *Series Circuits on Selected Telemessaging Subscribers*

Recent Regulatory Activity

- US Court Appeals overturns FCC Physical Collocation requirement (6/10/94)
- FCC reaffirmed most of its expanded Interconnection policies in an order released 7/24/94, but ordered virtual collocation, not physical
- FCC issued an NPRM on implementation of "split-billing" for certain LEC facilities shared by multiple access customers. Comments due February 1, 1995 and replies due February 16, 1995.

#046. *Delivery of Intra-LATA (NPA) 555-XXXX Dialed Number to Service Provider*

Related Recent Industry Forum Activity

- INC Issue #044, "Fictitious 800-555 Numbers". A need exists to set aside a block of fictitious 800-555 numbers to be used by the entertainment & advertising industry. One number (800-555-0199) recommended for use. *Final Closure 4/7/95*.
- ICCF Issue #277, "Access Arrangement for 555 Line Numbers". A Workshop was created to address viable 555 network arrangements and develop an ICCF Document. Editorial subgroup reviewed 5/26 draft of the "555 Technical Service Interconnection" document at June 14-15 mtg. Substantial changes were made in document. Focus is on what telcos might offer to a 555 assignee. Language covering interLATA call process for interconnecting networks was removed at June meeting. Focus is now on arrangement when 555 assignee and end user are both on the same network. Next subgroup mtg. is July 10 via conference call to develop text regarding LEC screening and how it may be different from translations, and next face to face meeting for editing revised document is August 22-23 in Virginia. Progress report at ICCF meeting is July 12, 13 in San Diego. **Significant changes were made to the document at last editorial session. A conference call is scheduled for 9/22/95, 10:00am-12:00noon ET. Kelly Daniels will set up the conference bridge. Agenda for conference call is to discuss Billing and Arrangement Section (Section 5), and Existing Network Capabilities Section (Section 6). Another face to face meeting is scheduled for 10/11-10/12 in either Chicago or Florida.**

#046. Delivery of Intra-LATA (NPA) 555-XXXX Dialed Number to Service Provider

Related Recent Industry Forum Activity - Continued

- OBF Issue #1038 MSG, "555 on NPA-NXX V&H Coordinates File". At OBF #48, Issue referred to the INC for input on notification of line level information to be used in billing. INC response: "Applications for line number assignments and their associated rating and billing will vary among 555 service providers. One on one negotiations will be required between local service providers and 555 service providers." **At OBF#51, ICCF presentation requested on 555 line number assignments, ordering, regulatory, network items to be given at OBF#52. MSG committee has questions regarding the service. Additional items identified for further discussion at OBF#52.**
- INC Issue #046, "Modification to 555 NXX Assignment Guidelines" - Guidelines need to be revised to include requirements preventing the purchase, sale or lease of 555 numbers. Proposed text for existing guidelines will be submitted at INC 17 for Initial Closure. **Agreement reached at INC 18 (8/4/95) to retain INC Issue #046 in Initial Closure pending a true-up of language for consistency with INC Issue #059.**
- INC Issue #058, "Modification to 555 NXX Assignment Guidelines" to address multiple reservation requests received during the open enrollment process (U.S./Canadian number reservation conflicts). Contributions related to the activation timeframe and extension requests under review. Conference call on June 20, 1995. **Conference call took place on 8/10/95. Proposed resolution statement drafted. Issue to be submitted for initial closure at INC 19 (9/11 - 9/15/95 in San Francisco).**
- INC Issue #059 accepted and assigned to INC Resource Management Workshop. Issue relates to the purchase and sale of numbers. Issue is broader than just 555 numbers, as in INC Issue #046. Proposed text for resolution of INC Issue #046 to be shared with the INC Resource Management Workshop for consideration for possible inclusion in all assignment guidelines. Proposed text agreed to and to will be included in applicable INC documents. **Agreement reached at INC 18 (8/4/95) to accept for Initial Closure. Next INC 9/11-9/15/95. Issue will remain in Initial closure until modifications are made to all guidelines.**

#048. Client Controlled Call Screening of a Forwarded Line"

Related Recent Industry Forum Activity

- INC Issue #040, "Call Forwarding ANI II", a new ANI II prefix is being requested to indicate the call being placed has been forwarded, to enable ICXs to block unauthorized calls to (i.e., 0-, 950, international). Issue went to Initial Closure 4/7/95. Consensus was reached not to assign ANI II digit pair for remotely activated call forwarding for toll fraud prevention since alternate solutions exist. *Final closure INC 17 6.30.95.*

#049 *Trigger Usage in a Multi-Provider Environment*

#050 *AIN IN Trigger Provisioning and Subscription*

#051 *Operations, Administration, Maintenance and Provisioning (O A M & P) Functionality Capability Access in a Multi-Provider Environment*

#052 *Criteria for Definition and Placement of Mediation Functions*

#053 *Application, Control and Management of Mediation Functions Between Multiple Service and Network Providers*

#054 *Management of Network Interactions Among Multiple Service Providers*

#055 *ISDN Feature Information*

Other Recent Legislative Activity

Pressler Bill, June 1995 On June 15, 1995 the Senate passed their bill by a 81-18 vote. The bill will most likely be considered in the House in July. Overall, the Senate bill allows LECs to provide information services, manufacturing, cable services, interLATA services and alarm services, but only through separate subsidiaries. The bill also contains numerous other provisions, including those regarding universal service, numbering administration, cable/telco cross ownership, and interLATA interconnection requirements. The bill allows LECs to enter in-region interLATA markets when (1) barriers to local exchange competition are dismantled, as outlined in a 14 point "competitive checklist", and (2) approval is given by the FCC after consultation with the Justice Department. Immediately upon enactment, RHCs could provide out-of-region interLATA service. The measure would eliminate rate-of-return regulation, and "dominant" LECs in each area must negotiate interconnection agreements with potential competitors. It permits manufacturing after fulfilling the measure's competitive checklist for opening up the local loop.

- **HR1555** August, 1995 On August 4, 1995 the House approved the bill by a 305-117 vote. The bill drastically reduces regulations on everything from cable television to local and long distance telephone services.

Other Related Recent Industry Forum Activity

- **ICCF Issue #275**, "Technical Interconnection and Routing Issues Associated with the Implementation of New Non-Geographic Codes" Workshop to develop a document describing access arrangements for new non-geographic services including existing interconnection access arrangements for wireline/wireless carriers, description of potential interconnection access arrangements and a recommended minimum set of interface attributes. Initial draft reviewed at the 3-23 mtg. 2nd draft reviewed at the June 13-14 mtg. in N.J. **Workshop meeting held Aug. 23-24 in Virginia to work on Translation Matrix. Next face to face meeting scheduled 10/10 and 10/11/95.**
- **ICCF Issue #063**, **Modification of NXX guidelines to Reflect Entry of New Numbering Resource Consumers**" Sections 3.0 and 8.4 of INC 95-0407-008 are of concern to new and potential market entrants and require review and possibly change. Issue accepted and assigned to a new CO NXX Workshop to be chaired by Jim Deak (NANPA) and Pam Kenworthy (MFS). Initial conference call scheduled for 9/21/95, 1:00-3:00 PM ET, 908-336-6000, PIN 6267.
- **OBF Expands Its Role** The OBF Primary Contacts, meeting in special session at OBF #50, have agreed to accept CLEC issues in the Forum. With this change, the Forum will now address issues between one LEC and another. A number of CLEC companies attended OBF #50, and several issues related to CLEC concerns were accepted by the O & P and Billing Committees. The addition of CLECs to the OBF is expected to impact virtually every aspect of the Forum process.
- **OBF Issue #1120 O&P** "Ordering Traditional Signaling to Non-Conforming End Offices for 500 Access Services" Permit the ordering of traditional signaling to non-conforming end offices for 500 Access Service. Newly accepted at OBF #50 and assigned to O & P Committee. **O & P Committee agreed to rename 8/9 NON Field on TQ to SAC NON Field to accommodate the ordering on traditional signaling to non-Conforming End Offices for all SACs. Issue referred to ASR Committee.**
- **OBF Issue #1122/O&P** "Unbundled Local Loops" A standardized method of ordering unbundled local loops and the exchange of customer account information to support directory and E911 information is needed. Issue presented at OBF #50. Issue accepted conditionally and assigned to the O & P Committee pending a final determination of how the needs of CLECs issues could best be addressed within the forums process. **Issue discussed at OBF#51. MFS presented their straw proposal which included data elements and new order forms. It was agreed to form a Task Force to work the issue. Task Force Meeting scheduled for 9/25/95-9/28/95 in Dallas (GTE to host).**

Other Related Recent Industry Forum Activity - Continued

- **OBF Issue #1140/BLG** "MECAB Document Language Revision for CLEC Status"
Revise the language in the MECAB document to incorporate the CLEC interconnection and billing relationships and remove any geographic restrictions. Issue accepted at OBF #50. Issue statement discussed at OBF#51(7/95). Additional homework items were identified and assigned for further review.
- **OBF Issue #1141 BLG**"To Bill Intrastate/IntraLATA and Local Usage on CABS Switched Access Bill" The Intrastate/IntraLATA and local usage should be billed on the Switched Access CABS bill. Unique identification of local usage is desired at the end office and summary levels of a CABS bill. Issue accepted at OBF #50 on a conditional basis. Issue submitted into Initial Closure at OBF#51 (7/95).
- **OBF Issue #1142 BLG** "Access Customer (AC) Notification of Multiple Exchange Carrier Billing Arrangements" With the emergence of CLECs, new meet point billing situations may arise between the involved LECs/CLECs. A process needs to be developed to address the exchange of information between the involved LECs/CLECs, the identification of impacted ACs, and the subsequent notification to the impacted ACs. Without this new process, the involved LEC/CLECs may not know which ACs are being impacted and the impacted ACs may not receive any advance notifications prior to the receipt of the first meet point bill. The process needs to be developed and included in the MECAB document. Issue accepted at OBF #50. Issue discussed at OBF#51. Draft resolution statement proposed. Further discussion scheduled.
- **OBF Issue #1149 MSG** "500 Service Record Types" With the advent of 500 Services there is a need for an industry standard for billing and identifying 500 service. Issue accepted at OBF # 50 for further discussion at OBF #51 (7/24-27). Issue discussed at OBF#51. Action items identified for companies to investigate use of records for billing these services.
- **OBF Issue #1062 ASR** "500 Access on End Office Detail Form" In Final Closure at OBF # 50 (5/95).

STATE OF TEXAS)
) ss
COUNTY OF DALLAS)

AFFIDAVIT OF JAMES D. JOERGER

James D. Joerger, being duly sworn and under oath deposes
and states as follows:

1. I am employed by MCI Telecommunications Corporation
(MCI) as a Senior Engineer within the Technical Standards Management
organization. My office address is 2400 N. Glenville Drive, Richardson, Texas
75082. In this capacity, I am responsible for coordinating industry standards and
forum activities associated with network signaling and switching, and operations
issues. These responsibilities allow for continual involvement in the daily status
and events that take place in these industry arenas. In addition to direct
involvement, I am also in constant contact with other industry participants in an
attempt to resolve technical interconnection issues.

2. I have also served as my company's voting representative to
the Committee T1 Standards organization (T1), which sponsors the
telecommunications standards bodies under the auspices of the Alliance for

Telecommunications Industry Solutions (ATIS), formerly the Exchange Carrier Standards Association (ECSA). In this capacity, I have been elected to the position of Interexchange Carrier Representative to the T1 Advisory Group, which advises and manages the technical subcommittee work of T1. In addition, I am also MCI's representative to the Network Operations Forum (NOF) and Industry Carriers Compatibility Forum (ICCF), industry fora responsible for operational and technical interconnection-related issues, respectively. The NOF and ICCF are industry fora under the Carrier Liaison Committee (CLC), which provides oversight management of the ATIS/CLC forums. I also represent my company at Carrier Liaison Committee (CLC) meetings to address issues relevant to the NOF and ICCF. Further, I am MCI's representative to the Electronic Communications Service Provider (ECSP) Committee, another ATIS sponsored organization that develops technical solutions for electronic surveillance.

3. In addition, from 1987 to 1990, I was employed by Ameritech Services Inc., as a manager in Common Channel Signaling (CCS) planning. In that capacity, I was closely involved with Signaling System No. 7 (SS7) issues for the Ameritech region and was Ameritech's national representative for SS7 standards activity. I also coordinated Ameritech's position on Bellcore generic requirements for SS7-based services. Also, while employed at Ameritech, I served as the Vice-Chair of the Bell Operating Company (BOC) CCS Support Group and as a member of the US Telephone Association (USTA) Common Channel Signaling Study Group, both of which dealt with national SS7 planning

issues. Prior to my Ameritech assignment, from 1969 to 1987, I was employed at Illinois Bell Telephone and was employed in various network planning, engineering and operational assignments. I have over 25 years of telecommunications experience.

4. I am submitting this affidavit in connection with the proceedings in the Commission docket captioned Computer III Further Remand Proceedings: Bell Operating Company Provision of Enhanced Services, Docket No. 95-20. If called to testify, I would be competent to testify to the facts stated in this affidavit.

5. I have been personally involved with the interexchange carrier request for delivery of Carrier Identification Code (CIC) information on domestic SS7 calls since it was first brought to the ICCF SS7 Workshop in 1988, including the sequence of events concerning MCI's request for its development and implementation. In addition, I have personally been involved in the technical review of various Bellcore documentation, the Technical Advisories (TA), and Technical Requirements (TR), which have now been replaced by Bellcore's Generic Requirements (GR) process. This affidavit addresses the reply comments filed by Bellcore¹ in this docket on behalf of the BOCs, its clients, concerning the SS7 Carrier Identification Code capability and the generic requirements process.

¹ Reply Comments of Bell Communications Research, Inc., dated May 19, 1995 (hereafter, "Bellcore Reply Comments") and Affidavit of Joan T. LaBanca attached (hereafter, "LaBanca affidavit").

6. The Bellcore Reply Comments and LaBanca Affidavit are inaccurate in asserting that the forums and standards process cannot be used to stall developments and implementations.² It is my experience that these industry bodies can delay the availability of technical capabilities. MCI's CIC delivery example is a model case of BOC obstructionism because it demonstrates how the BOCs can direct the outcome that they desire through being able to control outcomes in standards committees and the fora, by controlling how capabilities are specified in Bellcore's requirements, and by controlling when and whether a solution will be implemented. After over seven years of persistent effort to obtain CIC delivery, and despite Bellcore's claim that the approach of using a new SS7 parameter was simpler,³ the implementation of CIC delivery is still uncertain in terms of whether its delivery will be uniform and ubiquitous, or whether it will even be implemented at all.⁴ Although some of the BOCs and other local exchange carriers (LECs) have finally demonstrated a willingness to implement the CIC delivery mechanism, as illustrated in Attachment 1, several LECs continue to delay the CIC delivery capability by requiring unrealistic remuneration, despite the fact that GTE and Sprint have tariffed the capability at no charge.

² Bellcore Reply Comments at 3.

³ Id at 7.

⁴ Attachment I is a listing of inputs from the BOCs, as related to MCI's National Carrier Initiatives organization, which provides the BOCs' implementation status as of January 1996 for CIC delivery via the SS7 Carrier Identification Code parameter (CIP). MCI conducts various reviews with the BOCs for access capabilities. CIP is a prioritized access capability initiative for which MCI conducts regular status checks with the access providers.

**CIC DELIVERY WITH THE SS7 CARRIER IDENTIFICATION
CODE PARAMETER (CIP) IS NOT TECHNICALLY SUPERIOR
BUT MERELY SUITED TO BOC BUSINESS INTERESTS**

7. The SS7 CIC delivery issue discussed in the Affidavit of Peter P. Guggina, attached as Exhibit B to MCI's comments in CC Docket 95-20, and in Bellcore's response on behalf of its clients, is analogous to the problems that would be encountered by enhanced service providers (ESPs) in obtaining similar development commitments from the BOCs. MCI and the other interexchange carriers (IXCs) are as dependent as ESPs on interconnection with the BOCs' network capabilities and open access.

8. MCI made an initial request to the BOCs back in 1988 for a CIC delivery mechanism using the existing multi-frequency (MF) signaling protocol. This capability was requested to identify the "CIC-code" in the FG-D signaling information delivered to access customers at the signaling interface. CIC delivery would allow IXCs, for example, to provision universal trunk groups and eliminate the need to segregate traffic in order to identify service or reseller traffic usage. When MCI first requested that this capability be developed during one-on-one discussions with the BOCs, the BOCs convinced MCI that the delivery of CIC information would best be met by the impending implementation of interLATA SS7 signaling.⁵ MCI, supported by other IXCs, then formally requested the inclusion of SS7 CIC delivery within the BOCs' SS7 interface specification, which was being reviewed in the ICCF.

⁵ See correspondence provided as Attachment II containing LEC responses to MCI's requests to obtain a CIC delivery mechanism.

9. In particular, MCI requested that CIC information be delivered to IXCs in the SS7 protocol by modifying the procedures for an existing SS7 parameter, the Transit Network Selection parameter (TNS). The TNS parameter was already being planned for interLATA SS7 signaling to enable international call setup. The TNS parameter contained the CIC code of the international carrier when international calls were forwarded by the LECs to IXCs. So, when the call containing a TNS parameter was delivered to a non-international carrier, the TNS enabled that non-international IXC to select the international carrier to complete the call. MCI's request was for the TNS utility to be expanded so that CIC information could be transmitted to IXCs on all calls, whether domestic or international. MCI was aware when making this request that changes would be required in end-offices and tandem switches to deliver this capability, but was never told that its TNS request was technically infeasible. The upshot of this request was that the BOCs would not agree to using the TNS parameter; they insisted that a new signaling parameter had to be developed in standards. The BOCs' refusal prolonged the development and availability of a capability to meet the IXCs' request. A new SS7 signaling parameter then needed to be developed and included in the SS7 standards; this new signaling element became known as the Carrier Identification Code Parameter, or CIP.

10. Bellcore claims⁶ that using the SS7 CIP parameter to deliver CIC information is simpler than using the TNS parameter would have been. What Bellcore fails to mention in its comments is the fact that by engineering a

⁶ Bellcore Reply Comments at 7.

new SS7 parameter (i.e., CIP) to deliver CIC information, the only aspect that is "simpler" is that it is easier for the BOCs to apply a usage-based charging mechanism for sending this information, and to recover for its transmission over and above that revenue already recovered for Feature Group D access. It would have been perfectly possible for the BOCs to perform call setup using TNS to deliver the CIC information as MCI had requested. The BOCs would have had a difficult time using TNS as a billing indicator, however, because they would have had to continue using it during normal call setup for international calls, without any additional charge, while at the same time, imposing a separate additional charge for its delivery to IXCs on domestic calls and distinguishing between the two in their billing systems. Thus, because the BOCs expected a separate recovery for delivering CIC information on domestic calls, it became "simpler" for them to design a new parameter for sending it on such calls. Using CIP ensured a vertical service recording and charging mechanism for the BOCs, because its transmission for domestic SS7 call setup messages could be counted at the SS7 interface to the interexchange carriers should they ever decide to implement CIC delivery.

11. Further demonstration that MCI's request to deliver CIC information via the TNS parameter was a logical solution can be made using Bellcore's own documentation concerning a related issue. Currently, network providers are working to define technical approaches to enable local number portability. One of the technical alternatives proposed by some BOCs and Bellcore is a capability known as Release-To-Pivot (RTP). It is this capability

which supports MCI's TNS claim. Bellcore has published a technical specification⁷ which, in part, specifies that when the transmission of CIC information via SS7 signaling is necessary to support RTP -- a BOC defined capability -- it should be performed by sending the TNS parameter, and not the CIP parameter, between networks. This appears to be in direct conflict with Bellcore's position on the TNS vs. CIP issue. It is unclear how TNS for MCI's request was unsuitable, yet perfectly suitable to meet the BOCs' RTP capability needs.

12. Bellcore also states that the CIP "approach was pursued because it was a technically better approach, and its implementation would be less disruptive."⁸ This is an after-the-fact rationalization to support a decision made on financial self-interest grounds by the BOCs and Bellcore to prevent CIC delivery via the TNS parameter. There is no proof that TNS was a technically inferior solution. Bellcore is correct that the standards debate ostensibly centered on whether TNS or another new parameter (CIP) was most technically optimal, but it was clear from the standards discussions that the BOCs refused to consider the use of the TNS parameter for CIC delivery on domestic calls. And because the discussion was conducted in the standards working group sessions, the BOCs controlled the "consensus." The T1 voting process was irrelevant at this juncture because the BOCs were able to control the issue in the working

⁷ Bellcore Generic Requirements for the Signaling System 7 (SS7) Release-To-Pivot (RTP) Network Capability, GR-2857-CORE.

⁸ Bellcore Reply Comments at 7.

group, where voting does not occur. The working group uses the consensus process to determine the outcome of issues which are susceptible to numerical dominance by the RBOCs, Bellcore and USTA, to determine the outcome of issues in their favor. During these discussions, the equipment vendors were silent and did not express a preference, so as not to alienate either customer group (BOCs or the IXCs) debating the TNS vs. CIP issue.

13. The ultimate result was that after trying to obtain changes to the BOC/Bellcore SS7 interconnection specification and then arguing the same issue in standards, interexchange carriers had no choice but to either drop the issue or accept the CIC information capability designed as a new parameter. Technically, it is true that there was a "consensus" to deliver CIC information on domestic calls only via a new parameter, but this was only because the BOCs were able to determine that outcome and force it upon other industry segments.

14. Bellcore's comment⁹ that TNS "would have required several significant changes beyond just 'modifying an existing signaling element'" is incorrect. The CIP approach forced on the IXCs by the BOCs made the solution more difficult, not simpler. The CIP solution also requires changes in every BOC switch to generate the new parameter. Bellcore is mistaken in stating that, because the TNS solution required switch software changes and administrative procedures to determine to which network the CIC information should be delivered, it would have been inferior. Both solutions require software changes

⁹ LaBanca Affidavit at 1.

in the switches, end-offices and tandems. If Bellcore's argument were true, it would seem reasonable to assume that the CIP solution advocated by the BOCs would have been simple to implement and at little or no cost. That, however, is not what the BOCs have stated during implementation discussions.

15. Bellcore is also incorrect that "[b]y defining a specifically designed parameter for providing CIC information to carriers, the parameter could be tailored to the need, (i.e., provide only needed CIC information) and procedures associated with it could be straightforward."¹⁰ My experience is that the opposite has been true. Despite Bellcore/BOC claims, CIP has turned out to be more complex because the BOCs have not designed the Bellcore requirements to meet the needs expressed by the interexchange carriers. First, even after the standards work was complete, the BOCs were uncooperative and raised various excuses for not proceeding further.¹¹ In response to the BOCs' slow-rolling, the IXCs developed and delivered an access requirements document for CIC delivery via the CIP parameter in two weeks, and formally delivered it to the BOCs at ICCF #22 in March of 1991.¹² During subsequent

¹⁰ Bellcore Reply Comments at 7.

¹¹ Attachment III provides the Exchange Carrier report to ICCF #21 in November, 1990 in response to MCI's request for a status of CIP implementation. Attachment IV provides the Interexchange Carrier report to ICCF #21, stating their continuing collective need for the capability.

¹² The Interexchange Carriers Industry Committee (ICIC), a trade association of interLATA carriers, provided its access requirements for SS7 CIP to the BOCs via the ICCF in March 1991. The ICIC document provided the technical details for CIP delivery to meet the needs of interexchange carriers to receive CIC information for all domestic calls. The ICIC Access Requirements document for CIP is provided as Attachment V.

forum discussions and in comments to Bellcore on their switch specifications, IXC's again expressed the requirement for CIP to be delivered on all calls. When Bellcore's initial requirements were written, however, they specified the delivery of CIP only on "all-SS7" connections, thus failing to address the situation of interworking within the BOC network, i.e., when MF signaling coexists with SS7.

16. Subsequent IXC comments requested that the Bellcore requirements be revised to deliver CIP whenever the access connection interworked MF with SS7, but the BOCs decided against meeting this need.¹³ Instead, the BOCs decided that the CIP delivery requirements when MF-SS7 interworking occurred would be optional and not mandatory. Thus, it became uncertain as to whether BOC equipment vendors would develop CIP delivery software when the access connection was interworked MF-to-SS7. This decision seems particularly arbitrary, since the BOC switches already accommodate CIC information delivery in the TNS parameter for interworked MF-SS7 international calls. If the BOCs had agreed to use TNS instead of CIP, the MF to SS7 interworking functionality would have already been available. Hence, the BOCs' decision has made CIC delivery more complex and difficult because interexchange carriers will not be assured of a uniform implementation of MF-SS7 interworking capabilities. In order for CIC code information delivery

¹³ The ICIC also provided comments to Bellcore on its switch specifications (TR-NWT-000394) addressing ICIC concerns on CIP development and the failure of the requirements to support CIC delivery in the MF-SS7 environment. See correspondence (Attachment VI) between the ICIC and Bellcore on this issue.

to be of benefit to IXCs, the information must be ubiquitous and available on all calls. Experience with BOC CIP deployment information demonstrates that CIP will not be universally available, thus resulting in a more complex and potentially useless solution.

17 The manner in which the BOCs have addressed CIC information delivery and the availability of other new capabilities -- especially in light of the inconsistent approaches they have taken as to the use of the TNS parameter for CIC delivery, on the one hand, and local number portability, on the other -- thus appears to be determined more by their business strategies than by the needs of their customers or by inherent technical feasibility. The BOCs were well aware that IXCs would be able to construct more efficient networks if there were a CIC delivery mechanism, and that such efficiencies could result in reduced BOC access revenues. In addition, IXCs would be able to develop new services using the CIC information, which could impact BOC abilities to compete eventually as interLATA carriers. The BOCs' strategy for rolling out interLATA SS7 signaling had been for SS7 to provide no greater utility than MF had provided unless and until a new application for SS7 could be developed that could ensure an equal or greater access revenue recovery, or provide a new revenue stream for the BOCs. When it became possible to generate additional revenue by rolling out new SS7 parameters, the BOCs did so promptly. Thus, the BOCs delay implementation of a new capability until they need it for their own "retail" services or are otherwise convinced that it will generate increased revenues.

18. The BOCs' priorities are reflected in the enthusiasm they bring to the implementation of new capabilities that benefit themselves rather than their access customers. For example, during the time when MCI's TNS request was pending, other SS7 signaling information (that had not been delivered using MF) was being considered by the BOCs because it was projected to generate additional BOC revenue. In an SS7 implementation article written in July 1990, BellSouth addressed SS7 interconnection with interexchange carriers and the potential for delivering the Calling Party Number (CPN) parameter, which could lead to additional revenues. BellSouth's discussion of CPN reveals why the implementation of CIC delivery has been so slow, since BellSouth makes it clear that CPN, unlike CIC delivery, would immediately make it possible to generate additional revenue from IXCs using new signaling applications. The BOCs could get double revenue enhancement duty out of CPN -- not only through additional compensation for its delivery to IXCs, but also because CPN delivery to IXCs and its subsequent presentation to the called party would enhance the BOCs' own new applications, e.g., BellSouth's TouchStar service. BellSouth states:

[t]he billing issues that must be resolved deal with transporting additional parameters across network interfaces, specifically the Calling Party Number (CPN). The issues surrounding CPN deal with whose information it is and who compensates whom for delivering this information. The CPN will be used by Local Exchange Carriers to provide the TouchStar features discussed next. Additionally, ICs have either existing or planned services that currently use the Automatic Number Identification (ANI) in conjunction

with record retrieval or network management applications. The CPN frequently provides a more accurate identification of the calling party and as such could be used in these as well as other applications.¹⁴

In other words, CPN delivery could be a compensatory item and implemented when the BOCs worked out the billing issues for charging the IXCs receiving this information. Hence, the delivery and timing of capabilities appears to depend upon the BOCs' financial or business strategies, rather than customers' needs.

19. The "CIP vs. TNS" issue provides a useful illustration of the way in which BOCs respond to interconnection capability requests from other industry segments, whether IXCs or ESPs. That issue involved only one SS7 parameter; yet the availability of CIC information is still uncertain after seven years of industry activity. When this experience is applied and extended to enhanced service providers trying to plan for Long Term Network Unbundling capabilities, the uncertainty of availability becomes significantly compounded.

**DESPITE BELLCORE CLAIMS TO THE CONTRARY, THE
GENERIC REQUIREMENTS PROCESS IS A QUASI-
PRIVATE STANDARDS-SETTING PROCESS**

20. Bellcore takes exception¹⁵ to Guggina's comment that the generic requirements process is a private standards-setting process. The situations described above and in the Guggina Affidavit attached to MCI's Comments, however, demonstrate that the end result of Bellcore's generic

¹⁴ IEEE Communications magazine, a publication of the IEEE Communications Society, July, 1990 issue, Volume 28, No. 7, page 58.

¹⁵ Bellcore Reply Comments at 9.

requirements process is indeed private and essentially just another standards-type document. Even though Bellcore revised its requirements process in 1994,¹⁶ the end result has been the same. Bellcore has touted the benefits of the new process -- supposedly to better serve the industry by soliciting industry input earlier in the process to facilitate planning, clarify client (i.e., BOC) needs, and identify issues. Experience shows, however, as pointed out in the Guggina Affidavit,¹⁷ using Bellcore's Screen List Editing (SLE) service requirements as an example, that Bellcore's client needs do not always incorporate the needs of the BOCs' customers. When MCI and other interexchange carriers at the ICCF requested that the BOCs revise the SLE requirements to allow equal access routing of SS7 TCAP¹⁸ messages, the BOCs, without considering these inputs, unilaterally refused to address the issue, based on their contention that the routing of these messages was a BOC business decision. The BOCs also later refused to address this issue at the CLC.¹⁹

21. Hence, BOC directions to Bellcore as to their needs are not determined by customers' requests but, rather, are based on the selective business decisions and strategies of the BOCs. They ask the industry what they

¹⁶ Bellcore made a presentation at ICCF #31 (March 16-17, 1994) and at a Network Reliability Council meeting (April 25, 1995) describing Bellcore's revised generic requirements process.

¹⁷ P. Guggina Affidavit attached as Exhibit B to MCI's Comments at 40.

¹⁸ TCAP messages are SS7 Transaction Capability Application Part messages. The TCAP protocol is referred to as non-call associated signaling used to support switch-to-switch and switch-to database communications.

¹⁹ The record of the ICCF concerning the TCAP Screen List Editing message routing issue is attached as Attachment VII (ICCF #30, November 17-18, 1993), and Attachment VIII (ICCF #31, March 16-17, 1994).